What is claimed is:

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1. A method for locating three dimensional data in a three dimensional data set characteristic of an object wherein the three dimensional data is characteristic of a three dimensional feature in the object, the method comprising:.

acquiring a two dimensional data set characteristic of the object wherein said two dimensional data set includes a plurality of values, each value including an address;

locating those values in the two dimensional data set which are characteristic of the three dimensional feature in the object

acquiring a three dimensional data set characteristic of the object wherein the three dimensional data set includes a plurality of values, each value including an address, and;

selecting values and addresses from the three dimensional data set which are characteristic of the three dimensional feature as a function of the location of the data in the two dimensional image which is characteristic of the three dimensional feature.

2. A method as in claim 1 wherein three dimensional data set includes data points defined by height, and the values and addresses from the three dimensional data set characteristic of the three dimensional feature are measured for height with a template.

3. A method as in claim 2 wherein said template includes a plurality of three dimensional features positioned at different heights.

4. A method as in claim 1 wherein further comprising:

providing a golden part including three dimensional features;

capturing two dimensional and three dimensional data sets characteristic of the three dimensional features on the golden part;

locating two dimensional data from the two dimensional data set characteristic of the three dimensional feature calibrating the locations of the two

dimensional data characteristic of the three dimensional feature in the golden part against the three dimensional data characteristic of the three dimensional feature of the golden part such that the address of the two dimensional data characteristic of the three dimensional feature may be used to locate the address of the three dimensional data characteristic of the three dimensional feature.

5. A method as in claim 1 wherein said thee dimensional data set and said two dimensional data set are acquired by a single sensor which includes a plurality of columns and rows with at least one column operative in obtaining two dimensional data and the remaining columns operative in obtaining three dimensional data.

6. A method as in claim 1 wherein said three dimensional data set and said two dimensional data set are acquired by distinct sensors.

7. A method as in claim 1 wherein said two dimensional data set is evaluated to determine if a predetermined pattern of three dimensional data is found.

8. A method for evaluating the quality of a IC package where said IC package includes a plurality of three dimensional features, the method comprising:

acquiring a two dimensional image characteristic of at least three of the three dimensional features on the IC package;

acquiring a three dimensional image of at least three of the three dimensional features on the IC package;

providing a two dimensional template representing the expected configuration of the three dimensional features on the IC package, and;

comparing the two dimensional image against the two dimensional template and rejecting the quality of the semiconductor if the comparison reveals that the two dimensional image does not include three dimensional data of the expected configuration.

9. A method as in claim 8 further comprising:

evaluating the three dimensional image if the two dimensional comparison reveals that the two dimensional image includes data matching the expected configuration.

10. A method as in claim 9 wherein the data characteristic of the three dimensional feature in the three dimensional image is located within the three dimensional image as a function of the location of the data in the two dimensional image characteristic of the three dimensional feature.

11. A method as in claim 8 wherein the two dimensional image is a gray scale image and is correlated against the two dimensional template with normalized gray scale correlation.

12. A method as in claim 11 wherein the two dimensional template represents the number and location of the three dimensional features.

13. A method as in claim 12 wherein the two dimensional template represents the expected shape of the three dimensional feature.

14. A sensor system for acquiring data from an object including three dimensional features comprising:

a sensor including plurality of pixels arranged in rows and columns, each column of pixels including an associated analog to digital converter and each column including an associated processor;

at least one of said processors associated with at least one of said columns configured to acquire two dimensional data and said remaining columns configured to acquire three dimensional data.

15. A sensor system as in claim 14 further comprising:

a pair of offset lasers operative in illuminating said object when said three dimensional data is acquired by said sensor, and

a ring light operative in illuminating said object when said two dimensional data is acquired by said sensor.

16. A sensor system as in claim 15 wherein said pair of lasers and said ring light are illuminated sequentially.

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